

Water Quality:

A measure of the condition of water relative to a set of standards against which compliance can be assessed; most commonly the health of ecosystems, safety of human contact (fishing and swimming) and drinking water.

– US EPA

A River on Fire - Creation of the Clean Water Act



The Clean Water Act (CWA)

- Federal law empowers EPA to administer the Clean Water Act
- EPA delegates most its water quality authority in Washington to Dept. of Ecology
- Ecology issues permits for point source dischargers (like industries, cities & counties)
- Clean Water Act requires states to develop plans to address nonpoint sources (like OSS)



What's in the Clean Water Act?

- Water Quality Standards/Water Quality Assessment
- National Pollutant Discharge Elimination System (NPDES)
- Total Maximum Daily Loads (TMDLs)
- State Revolving Fund (support for low interest loan funding)
- Section 319 nonpoint source program/National Estuary Program (grant funding)


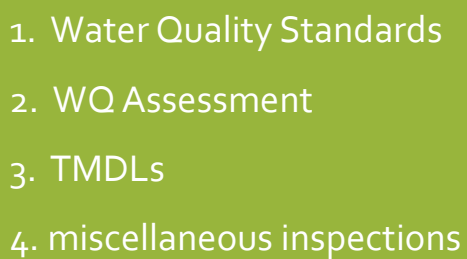

Washington State Water Pollution Control Act RCW 90.48*



"It shall be unlawful for any person to . . . discharge into any of the waters of this state, . . . any organic or inorganic matter that shall cause or tend to cause pollution of such waters"

*Allows Ecology to carry out provisions of the CWA.

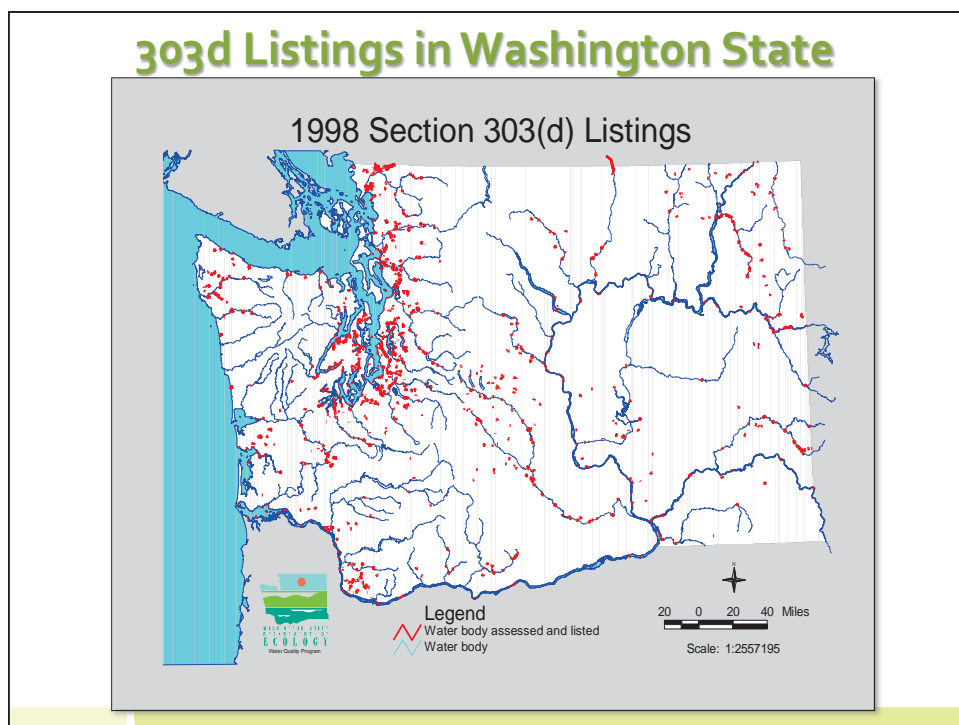
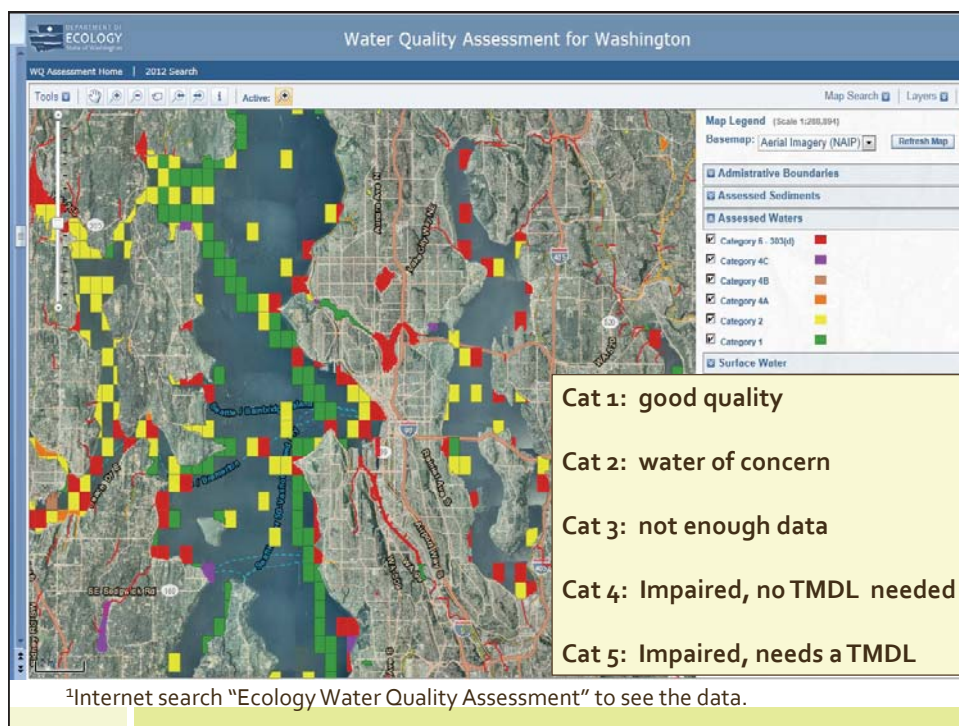
How do we put the laws and regulations into action?

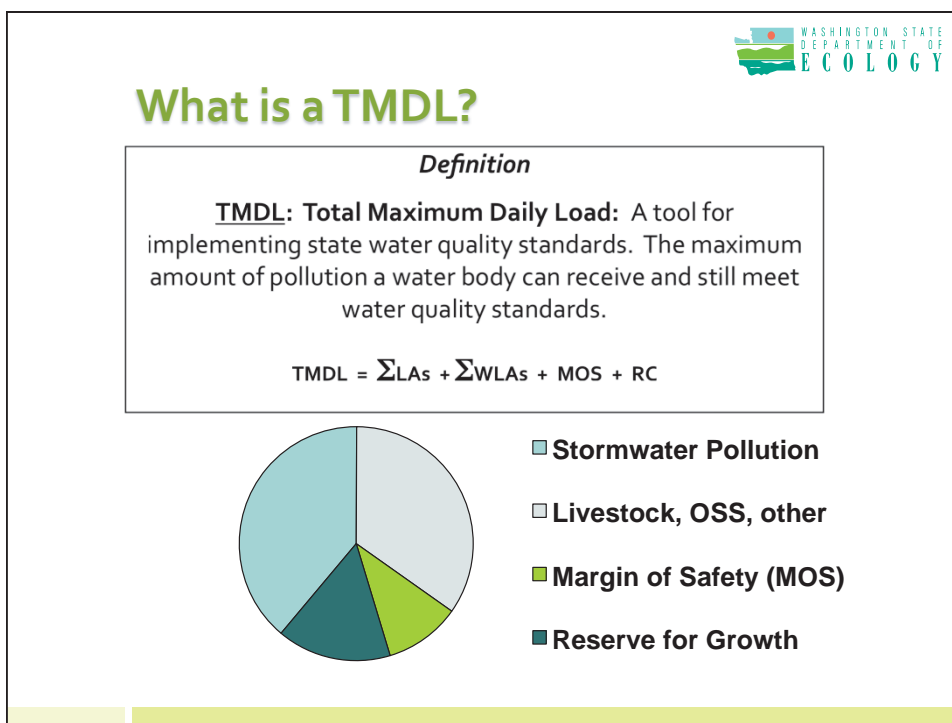
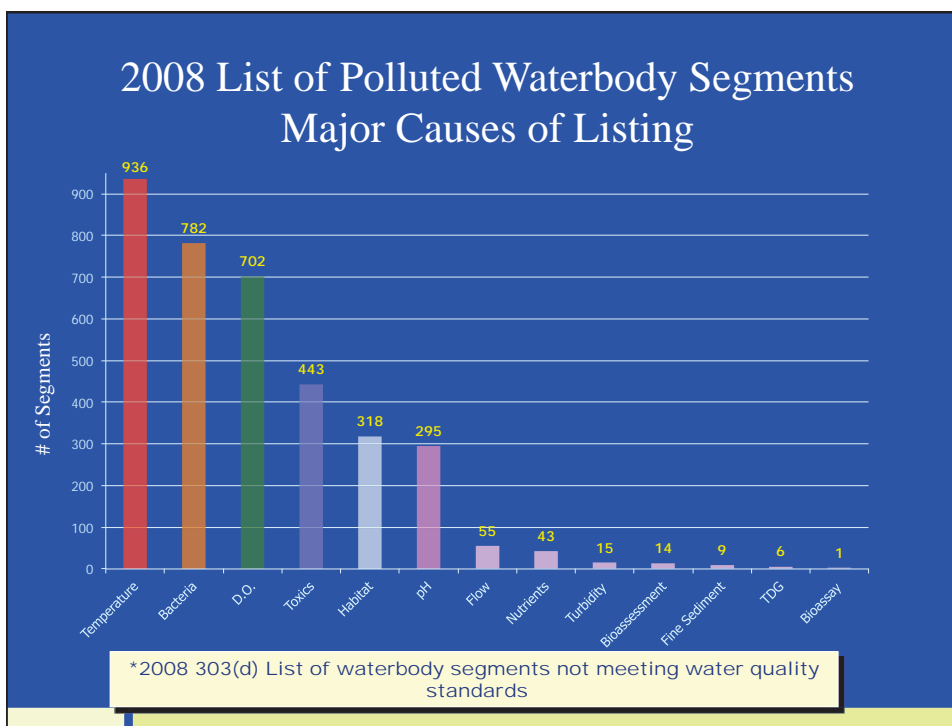
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1. Water Quality Standards
 2. WQ Assessment
 3. TMDLs
 4. miscellaneous inspections

Water Quality Standards

- Set bar for clean water
- Groundwater in WAC 173-200
- Surface Water in WAC 173-201A
 - All waters have designated uses
 - All lakes and flowing waters have numeric criteria for quality
 - Regulations prevent lowering of water quality

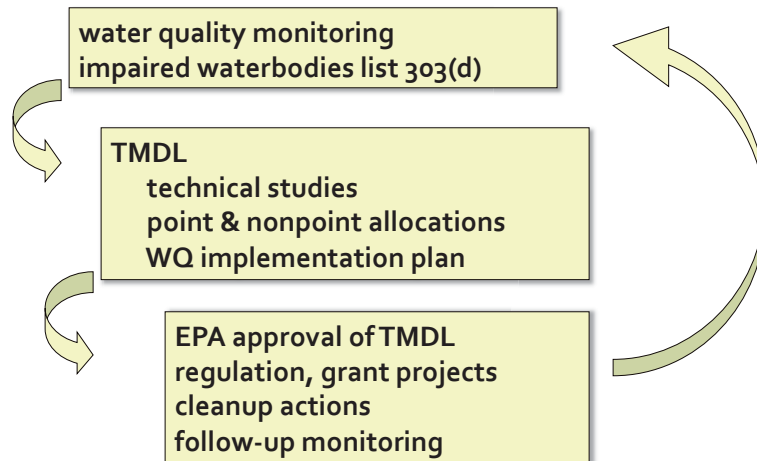








Water Quality Improvement (TMDL) Process:



miscellaneous inspections




Failing onsite system – Maltby Road, Snohomish County

- Seepage into roadside ditch was 250,000 cfu/100 mLs
- Nearby Little Bear Creek went from 70 to 400 cfu/100 mLs
- Evidence of pollution all the way down at mouth on Sam. River

Summary

- Water Quality is the condition of water relative to a set of standards
- Department of Ecology is delegated some authority under Clean Water Act
- Ecology addresses water quality thru WQ Standards, WQ Assessment, TMDLs, and miscellaneous inspections
- Even one failing onsite system can make a significant difference in quality of a water body



Finding Water Quality Problems.